

AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims below.

Listing of Claims:

1. (Currently amended) ~~Method A~~ The method for fabricating a trench isolation structure, comprising ~~the following steps~~:
~~Forming forming~~ a mask (3) on a substrate (1);
~~Forming forming~~ at least one trench (2) in the substrate (1) by ~~means of using~~ the mask (3);
~~Carrying out selective deposition of selectively growing~~ a first insulation material ~~in the trench (5)~~ to at least partially fill the at least one trench (2) in the substrate (1) with the insulation material (5) in the presence of the mask (3); and
applying a second insulation material (6) over ~~the an~~ entire surface of the structure ~~in order~~ to fill the at least one trench (2) in the substrate (1) at least up to ~~the a~~ top side of the mask (3).
2. (Currently amended) ~~Method The method~~ for fabricating a trench isolation structure according to Claim 1, ~~characterized in that wherein~~ the substrate (1) is made from silicon, the mask is made from silicon nitride and the first and second insulation materials (5, 6) are formed from silicon oxide.
3. (Currently amended) ~~Method The method~~ for fabricating a trench isolation structure according to Claim 1, ~~characterized in that following wherein after~~ the selective deposition a ~~conditioning step process~~ is carried out ~~in order~~ to compact the first insulation material (5).
4. (Currently amended) ~~Method The method~~ for fabricating a trench isolation structure according to Claim 1, ~~characterized in that 1, wherein~~ the second insulation material (6) is applied by ~~means of~~ an HDP process ("High Density Plasma" process), ~~preferably in the same process tool~~.

5. (Currently amended) ~~Method~~The method for fabricating a trench isolation structure according to claim 1, ~~characterized in that~~wherein the second insulation material (6) is planarized by chemical mechanical polishing (CMP) on the mask-(3).